

Chapter XIV

SUMMARY AND CONCLUSIONS

INTRODUCTION

In August 1992, the Waukesha County Executive requested the assistance of the Southeastern Wisconsin Regional Planning Commission in preparing a County development plan. Preparation of such a plan was seen as an ambitious undertaking, with no other county in the seven-county Southeastern Wisconsin Region having completed a countywide development plan as provided for under Section 59.97(3) of the Wisconsin Statutes. Concerns regarding development patterns and trends in the County, coupled with a perceived lack of affordable housing, provided the impetus for undertaking the County planning effort. It had become increasingly evident that, in order for Waukesha County to retain and enhance its existing desirable characteristics, a plan to accommodate and manage new development while preserving open space and protecting environmentally sensitive areas was needed.

Initiated in May 1993, the planning effort involved extensive inventories and analyses of the factors and conditions affecting the physical development of the County. These included inventories and analyses of the demography, economy, housing stock, natural resources, land uses, transportation and public utilities, and existing community plans and land use regulations. The planning program further involved the formulation of County development objectives, principles, and standards; the design of a land use plan and supporting housing, transportation, and park and open space plan elements; and the identification of measures to implement the plan effectively.

While the primary purpose of the County development plan is to guide the County and the civil towns within the County in joint decision-making regarding development matters in the unincorporated area of the County, it is also intended to provide guidance to the incorporated cities and villages involved in the planning process. The participation of the cities and villages, in addition to the towns, was important because it provided a basis for determining the future scale of population and economic activity and attendant urban development within the County as a whole, thereby enabling the sound preparation of functional plan

elements dealing with transportation, recreation, and housing. The participation of cities and villages in the planning effort also permitted conflicting development objectives between the incorporated municipalities and the towns within municipal extraterritorial planning areas to be addressed. Accordingly, throughout this report, planning information has been presented for incorporated cities and villages as well as for unincorporated towns, thereby providing needed context for understanding the broader framework within which the plan recommendations for the unincorporated town territory have been made.

It should be noted that the Waukesha County development plan presented herein has been referred to and entitled a "development plan" in deference to Section 59.97(3) of the Wisconsin Statutes, which authorizes county zoning agencies to direct the preparation of a "development plan" for the physical development of the county. The term "growth management" has been widely used in the recent past to characterize governmental efforts to identify and influence the type, location, and timing of urban development and attendant needs for public facilities and services, transportation systems, and parks and open space, among others, while protecting the overall quality of the environment. Accordingly, the County development plan is, in fact, and may be properly referred to as, a "growth management plan."

The planning program was carried out under the guidance of the Waukesha County Development Plan Advisory Committee, consisting of representatives of the County Executive's Office; the County Board of Supervisors; the Waukesha County Departments of Environmental Resources, Parks and Land Use, and Transportation; the Waukesha Unit of the Wisconsin Towns Association; and environmental, agricultural, business, and development interests from within the County. The full membership of that Committee is listed on the inside front cover of this report.

EXISTING CONDITIONS

Waukesha County encompasses about 580 square miles, or about 22 percent of the area of the seven-

county Southeastern Wisconsin Region. In 1990, the unincorporated area of the County consisted of 13 towns, which together encompassed an area of about 374 square miles, or about 64 percent of the total area of the County. The incorporated area consisted of seven cities and 18 villages, including a small part of the City of Milwaukee. Together, the incorporated municipalities encompassed an area of about 206 square miles, or about 36 percent of the total area of the County.

Descriptions of the demography, economy, natural resources, land uses, housing stock, transportation facilities, public utilities, and existing plans and land use regulations in Waukesha County is presented in Chapters II through VII of this report. A summary of the descriptions presented in these chapters follows.

Demography and Economy

The resident population of Waukesha County was about 304,700 persons in 1990, making the County the third most populous in Wisconsin, behind only Milwaukee and Dane Counties. The County exhibited its most significant population growth after 1950. The resident population increased by 84 percent during the 1950s, 46 percent during the 1960s, 21 percent during the 1970s, and 9 percent during the 1980s. In over four decades, from 1950 through 1990, the resident population of the County increased by 255 percent, while the population of the seven-county Southeastern Wisconsin Region increased by 46 percent. As a result, the County's share of the regional population increased from about 7 percent in 1950 to about 17 percent in 1990, a reflection of the decentralization of population away from Milwaukee County. The most recent estimates by the Wisconsin Department of Administration indicate that the County resident population had increased further to about 328,600 persons by 1995, an increase of nearly 24,000 persons, or about 8 percent, over the 1990 level.

The number of households in the County increased from about 23,600 in 1950 to about 106,000 in 1990. The number of households increased by 80 percent during the 1950s, 46 percent during the 1960s, 43 percent during the 1970s, and 20 percent during the 1980s. Between 1950 and 1990, the number of households in the County increased by 349 percent, while the number of households in the Region increased by 91 percent. Accordingly, the County's share of the regional households increased from about 7 percent in 1950 to about 16 percent in 1990. During past two decades, the rate of increase in households has exceeded the rate of population

growth in the County. During this time, the average household size in the County decreased, from 3.66 persons in 1970 to 2.83 persons in 1990, reflecting, among other factors, the historic decline in birth rates and attendant decrease in the number of children in family households, as well as an increase in the number of single-person households.

The number of employment opportunities, or jobs, in the County increased from about 15,500 in 1950 to about 172,000 in 1990. Total employment in the County increased by 99 percent during the 1950s, 148 percent during the 1960s, 67 percent during the 1970s, and 35 percent during the 1980s. Between 1950 and 1990, employment in the County increased eleven-fold, while employment in the Region increased by 79 percent. As a result, the County's share of regional employment increased from about 3 percent in 1950 to about 17 percent in 1990.

Natural Resource Base

Although it is a rapidly urbanizing area, Waukesha County still contains extensive areas of environmental significance. The location and extent of various elements of the natural resource base were inventoried and mapped under the planning program.

In 1990, wetlands occupied a combined area of about 81 square miles, or about 14 percent of the total area of the County; woodlands occupied about 46 square miles, or about 8 percent; and surface water, including 33 major lakes, comprised 22 square miles, or about 4 percent. Important wildlife habitat areas, identified in a 1985 inventory jointly conducted by the Commission and the Wisconsin Department of Natural Resources, encompassed about 182 square miles, or about 31 percent of the total area of the County. Floodlands, defined as areas subject to inundation by a 100-year recurrence interval flood event, not including about 24 square miles of surface water in lakes and streams, encompassed about 72 square miles, or about 12 percent of the total area of the County.

Many of the natural resource base elements of Waukesha County occur in linear concentrations in the landscape termed environmental corridors. One of the most important tasks completed under the regional planning program for Southeastern Wisconsin has been the identification and delineation of these corridors. Primary environmental corridors include a wide variety of important natural resource features and are, by definition, at least 400 acres in size, two miles long, and 200 feet wide. Secondary environmental corridors generally connect with the

primary environmental corridors and are at least 100 acres in size and one mile in length. In addition, smaller concentrations of natural resource base elements that are separated physically from the environmental corridors by intensive urban or agricultural land uses have been identified. These areas, which are at least five acres in size, are referred to as isolated natural resource areas.

Primary environmental corridors within Waukesha County are mainly associated with the natural resources located along major streams, around inland lakes, and within the Kettle Moraine and in 1990 encompassed about 145 square miles, or about 25 percent of the total area of the County. Secondary environmental corridors within the County are generally located along smaller perennial and intermittent streams and in 1990 encompassed about 12 square miles, or about 2 percent of the total area of the County. Isolated natural resource areas within the County include isolated wetlands, woodlands, and wildlife habitat areas and in 1990 encompassed about 13 square miles, or about 2 percent of the total area of the County.

The preservation of the environmental corridors and isolated natural resource areas in essentially natural, open uses will do much to maintain a high level of environmental quality in the County, protect its natural beauty, and provide invaluable outdoor recreational opportunities for the residents of the County. Conversely, since many of the corridors consist of wetland and floodland areas, the preservation of these lands will also avoid the creation of serious and costly environmental and developmental problems such as flood damage, poor drainage, wet basements, failing building and pavement foundations, excessive infiltration of clear water into sanitary sewers, and water pollution. Such preservation will also provide form and structure to urban development within the County, lending an attractive setting to various urban uses and enhancing real property values.

Analysis of detailed soil survey data indicated that portions of the County may provide important opportunities for such resource-based uses as agriculture and mineral extraction. Approximately 211 square miles, or about 36 percent of the total area of the County, are covered by soils classified as national prime farmland, consisting largely of Class I and Class II soils. Soil survey data indicate that much of the western half of the County has potentially commercially viable sand and gravel deposits; smaller areas, located primarily in the northeast portion of the County, have bedrock at, or near,

the surface, and, therefore, have the potential for commercial quarrying.

Land Use

The most recent land use inventory conducted by the Regional Planning Commission indicated that in 1990, urban land uses, including lands in residential, commercial, industrial, institutional, intensive recreational, and transportation uses together encompassed about 160 square miles, or about 28 percent of the total area of the County. Of the total area in urban use, about 96 square miles, or about 60 percent, were in residential uses; about 6 square miles, or about 4 percent each, were in commercial, industrial, and institutional uses; about 10 square miles, or about 6 percent, were in intensive recreational uses; and about 36 square miles, or about 22 percent, were in transportation, communication, or utility uses. For purposes of the land use inventory, the area within the rights-of-way of all streets and highways was included in the transportation, communication and utility land use category.

Between 1963 and 1990, lands in these urban categories together increased by about 75 square miles, or by about 87 percent. During this period the resident population of the County increased by 65 percent, the number of households by 123 percent, and the number of jobs by 416 percent.

The net residential land area, that is, the area devoted to residential use, excluding the supporting land access and collector streets, increased by about 48 square miles, accounting for about two-thirds of the total increase in urban land. Some of the incremental residential development occurred in and around existing urban centers; however, much of the new development occurred as scattered, isolated residential enclaves in rural areas. About 75 percent of the incremental residential land in the County between 1963 and 1990 was in the form of low- or suburban-density development.

Commercial and industrial land use in the County also increased significantly between 1963 and 1990. The area devoted to commercial land use approximately tripled, from about two square miles in 1963 to about six square miles in 1990. The area devoted to industrial use increased approximately fourfold, from about one and one-half square miles in 1963 to about six square miles in 1990.

The 1990 land use inventory further indicated that nonurban land uses, that is, agricultural lands, wetlands, woodlands, surface water, quarries, landfill sites, and other open lands, together comprised

about 421 square miles, or about 72 percent of the total area of the County, in 1990. Lands in agricultural use comprised about 223 square miles, or about 53 percent of all nonurban lands; wetlands, woodlands, and surface water together comprised about 154 square miles, or about 37 percent; and quarries, landfill sites, and other open lands comprised about 44 square miles, or about 10 percent. Between 1963 and 1990, nonurban land uses in the County together decreased by about 75 square miles, or by about 15 percent.

Transportation and Public Utilities

Waukesha County was served by a 716-mile arterial street and highway system in 1991. In the eastern portion of the County, the arterial street and highway system is relatively densely spaced, with arterials occurring at about one mile intervals in both a north-south and east-west direction. The arterial network in the rest of the County is less densely spaced, with arterials occurring at about two- to three-mile intervals.

Fixed-route transit service within Waukesha County is provided through the Waukesha County Transit System and the City of Waukesha Transit System Utility. In 1993, the Waukesha County Transit System consisted of seven regular bus routes providing primarily commuter-oriented service between Waukesha and the Milwaukee central business district. The routes totaled about 376 round-trip miles in length within Waukesha County and provided about 1,700 revenue vehicle-miles of service per average weekday. Rather than operate these routes directly, the County contracted for all elements of their operation with Wisconsin Coach Lines, Inc., and with the Milwaukee County Transit System. In 1993, the fixed-route transit service operated by the City of Waukesha Transit System Utility consisted of nine bus routes totaling about 112 round-trip miles in length. The system provided about 2,000 revenue vehicle-miles of service per average weekday. The Transit System provided fixed-route service within the City of Waukesha and between Waukesha and some major trip generators outside of the City.

There were three public-use airports in Waukesha County in 1995: Waukesha County-Crites Field in the City of Waukesha, Capitol Airport in the City of Brookfield, and Aero Park Airport in the Village of Menomonee Falls. Two of these, Capitol Airport and Waukesha County-Crites Field, are included in the adopted regional airport system plan and accommodate most of the general-aviation activity in the County. These two airports are considered to be

essential to the air transportation needs of the County, serving as reliever airports for Milwaukee County's General Mitchell Field, the only airport within the Region offering commercial service.

In 1993, Waukesha County was served by 10 public wastewater treatment plants, seven of which were located within the County. The seven treatment plants within the County included the City of Oconomowoc treatment plant, the Village of Dousman treatment plant, the Delafield-Hartland Water Pollution Control Commission treatment plant, the Village of Mukwonago treatment plant, the City of Waukesha treatment plant, the Village of Sussex treatment plant, and the Fox River Pollution Control Center treatment plant. Much of the eastern area of the County was served by the Milwaukee Metropolitan Sewerage District, which operates sewage treatment plants located on Lake Michigan in the Cities of Milwaukee and Oak Creek. Sewerage service within the County was also provided by the Town of Norway Sanitary District No. 1 which operates a sewage treatment plant in the Town of Norway, Racine County. The 10 existing sewage treatment plants and the tributary sewage collection and conveyance systems in the County together served an area of about 102 square miles, or about 17 percent of the total area of the County. The 1990 resident population of the areas served was estimated to be 220,000 people, or about 72 percent of the total population of the County.

Adopted Plans

The county development plan is intended to refine and detail adopted regional plans, taking into account and integrating, as appropriate, existing County and local development objectives. The adopted regional plans most relevant to the preparation of the County development plan included the regional land use, regional transportation system, regional water quality management, and regional park and open space plans, which provided a basic framework for the preparation of the County development plan. Existing County plans most relevant to the preparation of the County development plan included the County agricultural land preservation plan and the County solid waste management plan.

In addition to the aforereferenced regional and county plans, local plans have been completed by cities, villages, and towns within the County. By the end 1994, 28 of the 38 communities in Waukesha County, 6 cities, 12 villages, and 10 towns, had prepared a local master plan or the land use element of such a plan. Twenty-six of those communities had formally adopted their plans.

Four cities and five villages in the County included adjacent unincorporated areas in their land use plans pursuant to the extraterritorial planning authority granted under Section 62.23 of the Wisconsin Statutes. The area of the County covered by adopted local land use plans, taking into account extraterritorial city and village planning areas, was about 484 square miles, or about 83 percent of the total area of the County. Of this total area, about 190 square miles, or 39 percent, were designated for urban residential uses; about 32 square miles, or 7 percent, were designated for commercial or industrial uses; about 27 square miles, or 6 percent, were designated for other urban uses; and about 235 square miles, or 48 percent, were designated for nonurban uses.

Existing Land Use Regulations

General zoning was in effect in all communities in Waukesha County in 1993. Four towns in the County, Genesee, Oconomowoc, Ottawa, and Vernon, were under the jurisdiction of the County zoning ordinance, while the remaining 9 towns had adopted their own zoning ordinances, after adopting village powers. Floodland zoning ordinances were in effect in 1993 in all parts of Waukesha County where flood hazard areas had been identified. The County shoreland zoning ordinance was in effect in the statutory shorelands of the unincorporated area of the County. Some 19 of the 24 cities and villages in the County had adopted shoreland-wetland zoning ordinances. Of the five remaining villages, three, the Villages of Eagle, North Prairie, and Wales, did not contain any shoreland wetlands and were thus not required to adopt such ordinances; two, the Villages of Lannon and Pewaukee, although containing shoreland wetlands, had not yet adopted such ordinances.

In 1993, lands zoned for urban residential use, including lands placed in agricultural districts permitting residential development on lots of less than five acres, encompassed a total of about 302 square miles, or about 52 percent of the total area of the County. About 165 square miles, or about 55 percent of the total area zoned residential, was undeveloped and available for development. This included about 95 square miles zoned for suburban-density development, about 60 square miles for low-density development, about eight square miles for medium-density development, and about two square miles for high-density development. It is estimated that, upon full development, such lands would be able to accommodate an additional 230,000 persons, about 73 percent more than the 1990 resident population of the County of 304,700 persons. At

the rate of growth in population envisioned for Waukesha County under an intermediate-growth scenario, it would take about 50 years to utilize fully all the proposed additional residential land in the County. It is thus apparent that the County as a whole has been overzoned for residential use.

Land zoned for commercial use in Waukesha County encompassed about 14 square miles, or about 2 percent of the total area of the County, in 1993. About four and one-half square miles, or 31 percent of this total, were undeveloped and available for development. Land zoned for industrial use encompassed about 24 square miles, or about 4 percent of the total area of the County. About eight and one-half square miles, or about 35 percent of this total, were undeveloped and available for development. At the rate of growth in commercial and industrial employment envisioned for Waukesha County under an intermediate regional growth scenario, it would take about 50 years to utilize fully all the proposed additional commercial land and 90 years to utilize fully all the proposed additional industrial land. It is thus apparent that the County as a whole has also been overzoned for commercial and industrial use.

Lands zoned for nonurban use encompassed about 213 square miles, or about 37 percent of the total area of the County, in 1993. Lowland conservancy zoning districts encompassed about 106 square miles, or about 18 percent of the total area of the County, while upland conservancy zoning districts, permitting residential development at a density of at least five acres per dwelling unit, encompassed about 1.6 square miles, or less than 1 percent of the County area. Rural residential zoning districts, also permitting residential development at a density of at least five acres per dwelling unit, encompassed about 12 square miles, or about 2 percent of the total area of the County. Prime agricultural zoning districts, with minimum parcel sizes of 35 acres or more, encompassed about 47 square miles, or about 8 percent of the total area of the County. About 13 square miles, or 2 percent of the total area of the County, had been placed in other agricultural zoning districts, with minimum parcel sizes ranging between five and 35 acres.

Housing

As already noted, the impetus for the preparation of the County development plan derived in part from a concern regarding a lack of affordable housing in Waukesha County. The planning program, therefore, included a detailed inventory and analysis of

the existing housing stock and attendant housing occupancy costs.

On the basis of the 1990 Federal Census of Population and Housing, there were about 110,500 housing units in Waukesha County in 1990, 106,000 of which were occupied at the time of the Census and 4,500 of which were vacant. Of the occupied housing stock, about 82,000 housing units, or about 77 percent, were owner-occupied and about 24,000 housing units, or about 23 percent, were renter-occupied. The proportion of owner-occupied housing in Waukesha County, 77 percent, was greater than for the Region, 61 percent, and for the State, 67 percent. The median value of owner-occupied housing units was \$96,100 for Waukesha County in 1990, significantly higher than that for the Region, \$74,200, and for the State, \$62,100. The median gross monthly rent for renter-occupied housing units was \$540 for Waukesha County in 1990, also significantly higher than that for the Region, \$440, and for the State, \$400.

About 1,900 households, or about 2 percent of all households in the County, resided in substandard or overcrowded housing in 1990. Such households are considered to have a physical housing need, according to the housing standards adopted by the Waukesha County Development Plan Advisory Committee. About 20,400 households, or about 19 percent of all households in Waukesha County, paid more than 30 percent of their adjusted gross income for housing in 1990 and were considered to be in economic need, based upon the housing standards adopted by the Advisory Committee. About 13,500 of the households in economic need had a 1990 household income of less than \$27,500 and were considered to be in greatest housing need or most likely unable to secure adequate housing in the County at a cost commensurate with their incomes. It was also estimated that in 1990 there were about 6,500 households residing outside of the County, which included workers who commuted to workplaces in Waukesha County and would choose to live in the County if they could do so at a cost commensurate with their incomes.

The estimated costs to construct new minimum-size housing in Waukesha County in 1994 ranged from about \$105,400 for a 3-bedroom single-family housing unit situated on a 7,200 square foot lot to about \$35,200 for a one-bedroom housing unit in a multi-family structure developed at an overall density of about 14 units per acre. Significant cost savings can be achieved by providing new housing in the form of two-family and multi-family structures. For

example, in 1994 the estimated cost to provide a minimum-size two-bedroom single-family home, \$85,400, was about \$25,000, or 42 percent, more than the cost of a minimum size two-bedroom unit in a two-family structure, \$60,300, and about \$36,000, or 74 percent, more than the cost of a minimum-size two-bedroom unit in a multi-family structure, \$49,100.

Housing structure types, housing unit sizes, and lot sizes are all regulated by community zoning regulations. The existing zoning ordinances in the County as applied to undeveloped land were analyzed to identify the extent to which they would accommodate minimum-size housing and minimum-size lots with various residential structure types. The analysis identified about 39 square miles of vacant residentially zoned land located within planned sanitary sewer service areas, excluding any such lands located within environmental corridors. About one square mile, or less than 3 percent of this area, was zoned to accommodate minimum-size housing units on minimum-size single- and two-family residential lots or minimum-size housing units in multi-family structures at densities greater than or equal to 14 units per net residential acre.

A number of local, County, State, and Federal programs have been put in place to lessen physical and economic housing problems in the County; a summary of these programs is provided in Table 107 in Chapter VII of this report. It was estimated that about 4,000 households in the County received assistance ranging from homebuyer counseling to substantial rent subsidy under these programs in 1994. The level of government activity in housing within the County does not appear to be sufficient to meet existing and probable future housing needs in the County, particularly among households having lower incomes.

COUNTY DEVELOPMENT PLAN OBJECTIVES, PRINCIPLES, AND STANDARDS

Planning is a rational process for formulating and achieving objectives. Consequently, the formulation of objectives is an essential task that must be undertaken before plans can be prepared. As a basis for the preparation of the County development plan, the Waukesha County Development Plan Advisory Committee recommended a set of land use, housing, transportation and park and open space objectives, supporting principles, and related standards. The objectives and standards were derived from objectives and standards contained in adopted regional plans which were considered by